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(71) Applicants *(for all designated States except US)*: **ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE** [KR/KR]; 161 Gajeong-dong, Yuseong-gu, Daejeon 305-350 (KR). **SAMSUNG ELECTRONICS CO., LTD.** [KR/KR]; 416 Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 442-742 (KR). **KT Corporation** [KR/KR]; 206 Jungja-dong, Bundang-gu, Seongnam-city, kyeongki-do, 463-711 (KR). **SK Telecom Co., Ltd.** [KR/KR]; 99 Seorin-dong, Jongro-gu, Seoul 110-110 (KR). **KTFREETEL CO., LTD.** [KR/KR]; 890-20 Daechi-dong, Gangnam-gu, Seoul 135-280 (KR). **HANARO TELECOM, INC.** [KR/KR]; Shindongah Fire & Marine Insurance Building 43, Taepyeongno 2-ga, Jung-gu, Seoul 100-733 (KR).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **CHO, Seok-Heon** [KR/KR]; 775-21 Shin-dong, Iksan-city, Jeollabuk-do 570-976 (KR). **PARK, Ae-Soon** [KR/KR]; Hanvit Apt. 138-301, Eoeun-dong, Yuseong-gu, Daejeon-city 305-755 (KR). **YOON, Chul-Sik** [KR/KR]; Seonkyeong Apt. 4-402, 255-1, Hagye-dong, Nowon-gu, Seoul 139-230 (KR). **KIM, Kyung-Soo** [KR/KR]; Hanul Apt. 109-1702, Shinseong-dong, Yuseong-gu, Daejeon-city 305-345 (KR). **AHN, Jee-Hwan** [KR/KR]; 149-7 Sinseong-dong, Yuseong-gu, Daejeon-city 305-345 (KR).

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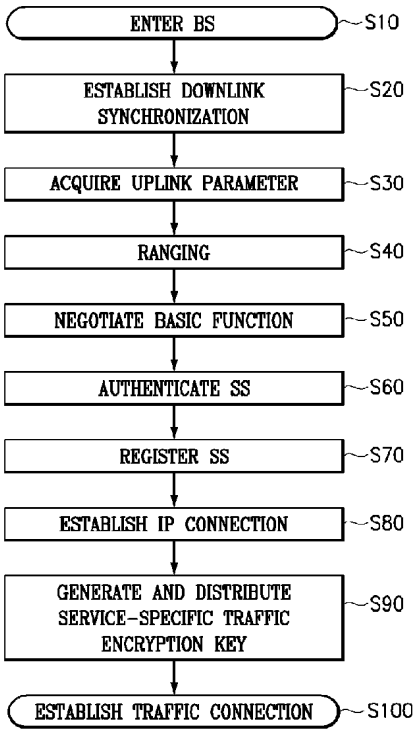
(54) Title: METHOD FOR REQUESTING, GENERATING AND DISTRIBUTING SERVICE-SPECIFIC TRAFFIC ENCRYPTION KEY IN WIRELESS PORTABLE INTERNET SYSTEM, APPARATUS FOR THE SAME, AND PROTOCOL CONFIGURATION METHOD FOR THE SAME



(57) Abstract: Disclosed are a method for requesting, generating and distributing a service-specific traffic encryption key in a wireless portable Internet system, an apparatus for the same, and a protocol configuration method for the same. In the present invention, a subscriber station sends a Key Request message for requesting a service-specific traffic encryption key to the base station using a PKM-REQ MAC message, and a base station analyzes the Key Request message to generate the requested service-specific traffic encryption key. Subsequently, the base station sends a Key Reply message, including the generated service-specific traffic encryption key, to the subscriber station using a PKM-RSP MAC message. If the base station fails to generate the key, the base station sends a Key Reject message, including a reason for the failure, to the subscriber station.

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(74) **Agent: YOU ME PATENT AND LAW FIRM**; Seolim Bldg., 649-10, Yoksam-dong, Kangnam-ku, Seoul 135-080 (KR).

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